Application No.: 10/580,425 2 Docket No.: 638772009500

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Claim I (Currently amended): A method for the preparation of a platinum(II) complex containing a neutral bidentate ligand, the method comprising the step of reacting a bisdicarboxylatoplatinate(II) species with a neutral bidentate ligand to form a neutral dicarboxylatoplatinum(II) complex product containing a neutral bidentate ligand, wherein the neutral bidentate ligand is a diamine, a dithioether, a diseleno ether, or a heterocyclic amine with an S donor atom.

Claim 2 (Previously presented): The method according to claim 1, wherein the bis-dicarboxylatoplatinate(II) species and ligand are reacted at a temperature of  $40^{\circ}$ C to  $100^{\circ}$ C for a period of 0.5 to 3 hours.

Claim 3 (Previously presented): The method according to claim 2, wherein the bisdicarboxylatoplatinate(II) species and ligand are reacted at a temperature of approximately 95°C.

Claim 4 (Previously presented): The method according to claim 2, wherein the bisdicarboxylatoplatinate(II) species and ligand are reacted for approximately 1 hour.

Claim 5 (Currently amended): The method according to claim 1, wherein <u>any</u> dicarboxylatoplatinate(II) species contaminating the product [[are]] <u>is</u> removed from the product by dissolving the product in distilled water and adding an oxalate which transforms the dicarboxylatoplatinate(II) species into a species that can be separated from the dissolved product by filtration.

Claim 6 (Original): The method according to claim 5, wherein the oxalate is Cs<sub>2</sub>C<sub>2</sub>O<sub>4</sub>.

Claim 7 (Canceled)

Claim 8 (Currently amended): The method according to elaim 7 claim 1, wherein the [[amine]] neutral bidentate ligand is a diamine.

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Claim 9 (Original): The method according to claim 8, for the preparation of chemically and optically pure oxaliplatin, wherein the ligand is optically pure trans-1-1,2-diaminocyclohexane.

Claims 10-11 (Canceled)

Claim 12 (Currently amended): The method according to elaim 11 claim 1, wherein the neutral bidentate ligand is a neutral bidentate heterocyclic amine with an S donor atom.

Claim 13 (Previously presented): The method according to claim 12, wherein the neutral bidentate heterocyclic amine includes thioethereal S.

Claim 14 (Original): The method according to claim 13, wherein the neutral bidentate ligand is a 1-alkyl/aryl-2-alkylthioalkyl/aryl heterocyclic amine.

Claim 15 (Original): The method according to claim 14, wherein the heterocyclic amine is an imidazole or pyridine.

Claim 16 (Original): The method according to claim 15, wherein the neutral bidentate ligand is:

Ligand (i) 1-methyl-2-methylthioethylimidazole,

Ligand (ii) 1-methyl-2-methylthiopropylimidazole,

Ligand (iii) 1-butyl-2-methylthiomethylimidazole,

Ligand (iv) 1-methyl-2-methylthiomethylimidazole,

Ligand (v) 1-butyl-2-methylthioethylimidazole,

Ligand (vi) 2-methylthiomethylpyridine.

Ligand (vii) 2-methylthioethylpyridine, or

Ligand (viii) 2-methylthiopropylpyridine.

Claims 17-18 (Canceled)

Claim 19 (Currently amended): The method according to elaim 10 claim 1, wherein the neutral bidentate ligand is a dithioether.

Claim 20 (Original): The method according to claim 19, wherein the neutral bidentate ligand is Ligand (xi) 2,5-dithiahexane.

Claim 21 (Currently amended): The method according to elaim 10 claim 1, wherein the neutral bidentate ligand is a diseleno ether.

Claim 22 (Original): The method according to claim 21, wherein the neutral bidentate ligand is Ligand (xii) 2,5-diseleno hexane.

Claim 23 (Original): An oxalatoplatinum(II) complex containing a neutral bidentate ligand having a heterocyclic amine with a thioethereal S donor atom.

Claim 24 (Original): Oxalato(1-methyl-2-methylthioethylimidazole)platinum(II).

Claim 25 (Original): Oxalato(1-methyl-2-methylthiopropylimidazole)platinum(II).

Claim 26 (Original): Oxalato(1-butyl-2-methylthiomethylimidazole)platinum(II).

Claim 27 (Original): Oxalato(1-methyl-2-methylthiomethylimidazole)platinum(II).

Claim 28 (Previously presented): Oxalato(1-butyl-2-methylthioethylimidazole)platinum(II).

Claim 29 (Original): Oxalato(2-methylthiomethylpyridine)platinum(II).

Claim 30 (Original): Oxalato(1-amino-2-thioethylpyridine)platinum (II).

Claim 31 (Original): Oxalato(1-amino-2-thiopropylpyridine)platinum (II).

Claim 32 (Original): Oxalato(1-amino-2-thiomethylethane)platinum(II).

Claim 33 (Original): Oxalato(1-amino-2-thioethylethane)platinum(II).

Claim 34 (Original): Oxalato(2,5-dithiahexane)platinum(II).

Claim 35 (Original): Oxalato(2,5-diseleno hexane)platinum(II).

Claim 36 (Previously presented): A method of treating cancer in a patient, the method comprising administering a therapeutically effective amount of the oxalatoplatinum(II) complex of claim 23 to a patient in need thereof.

Claims 37-38 (Canceled)

Claim 39 (Previously presented): An oxalatoplatinum(II) complex product selected from the group consisting of

oxalato(1-methyl-2-methylthioethylimidazole)platinum(II),

oxalato(1-methyl-2-methylthiopropylimidazole)platinum(II),

oxalato(1-butyl-2-methylthiomethylimidazole)platinum(II),

oxalato(1-methyl-2-methylthiomethylimidazole)platinum(II),

oxalato(1-butyl-2-methylthioethylimidazole)platinum(II),

oxalato(2-methylthiomethylpyridine)platinum(II),

 $oxalato (1\hbox{-}amino\hbox{-}2\hbox{-}thioethyl pyridine) platinum (II),$ 

oxalato(1-amino-2-thiopropylpyridine)platinum (II),

oxalato(1-amino-2-thiomethylethane)platinum(II),

oxalato(1-amino -2-thioethylethane)platinum(II),

oxalato(2,5-dithiahexane)platinum(II),

oxalato(2,5-diseleno hexane)platinum(II), and

oxaliplatin,

wherein the product contains no traces of silver.

Claim 40 (Previously presented): A method for producing a bis-oxalatoplatinate(II) species, the method comprising the step of either reacting a platinum(II) compound or reacting a platinum(IV) compound with an oxalate at a high mole ratio of greater than 1:4.

Claim 41 (Original): The method according to claim 40, wherein the platinum(II) or platinum(IV) compound and oxalate salt are reacted at a high mole ratio of 1:8 or greater. Claim 42 (Original): The method according to claim 41, wherein the platinum(II) or platinum(IV) compound and oxalate are reacted at a high mole ratio of 1:16 or greater.

Claim 43 (Original): The method according to claim 42, wherein the platinum(II) or platinum(IV) compound and oxalate are reacted at a high mole ratio of 1:24 or greater.

Claim 44 (Original): The method according to claim 40, wherein the platinum(II) compound is  $K_2PtX_4$  where X is a halide.

Claim 45 (Original): The method according to claim 40, wherein the platinum(IV) compound is  $K_2PtX_6$  where X is a halide.

Claim 46 (Original): The method according to claim 44, wherein X is Cl.

Claim 47 (Original): The method according to claim 45, wherein the platinum(IV) compound is reduced to platinum(II) by the oxalate.

Claim 48 (Original): The method according to claim 45, wherein the platinum(IV) compound is reduced by  $SO_2$  or sulfite.

Claim 49 (Original): The method according to claim 40, wherein the oxalate is K<sub>2</sub>C<sub>2</sub>O<sub>4</sub>.

Claim 50 (Previously presented): The method according to claim 40, wherein the bisoxalatoplatinate(II) species is K<sub>2</sub>Pt(C<sub>2</sub>O<sub>4</sub>)<sub>2</sub>.2H<sub>2</sub>O.

Claim 51 (Original): The method according to claim 40, wherein the platinum( $\Pi$ ) compound or platinum( $\Pi$ ) compound and oxalate are reacted at a temperature of from 40°C to less than 100°C for a period of 0.5 to 4 hours.

Claim 52 (Original): The method according to claim 51, wherein the platinum(II) compound or platinum(IV) compound and oxalate are reacted at a temperature of approximately 95°C.

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Claim 53 (Original): The method according to claim 51, wherein the platinum(II) compound or platinum(IV) compound are reacted for approximately 1 hour.

Claim 54 (Original): The method according to claim 45, wherein X is Cl.

Claim 55 (Previously presented): The method according to claim 1, further comprising the step of recrystallizing the neutral dicarboxylatoplatinum(II) complex product to form a pure dicarboxylatoplatinum(II) complex containing a neutral bidentate ligand.

Claim 56 (Previously presented): The method according to claim 55, wherein the bis-dicarboxylatoplatinate(II) species and ligand are reacted at a temperature of 40°C to 100°C for a period of 0.5 to 3 hours.

Claim 57 (Previously presented): The method according to claim 55, wherein dicarboxylatoplatinate(II) species contaminating the product are removed from the product by dissolving the product in distilled water and adding an oxalate which transforms the dicarboxylatoplatinate(II) species into a species that can be separated from the dissolved product by filtration

Claim 58 (Previously presented): The method according to claim 55, wherein the neutral bidentate ligand is an amine.

Claim 59 (Previously presented): The method according to claim 55, wherein the neutral bidentate ligand contains donor atoms other than N, or N together with a donor atom other than N.

Claim 60 (Previously presented): An oxaliplatin product containing no traces of silver.